CLAIMS

What is claimed is:

1.   A method of handling a financial transaction using an automated teller machine that

accepts an account identifying medium for identifying an account at one of a plurality of

5   financial institutions, said medium being provided by said one of a plurality of financial

institutions, comprising the steps of:

identifying an associated financial institution, with which a transaction is to be conducted,

based on said account identifying medium inserted into said automated teller machine;

creating an associate transaction request message based on information of said identified

10   associated financial institution;

transmitting said created associate transaction request message to a computer system of

said associated financial institution through a relay center, without passing through a computer

system of another financial institution; and

receiving an associate transaction response message corresponding to said transaction

15   request message from the computer system of said associated financial institution through said

relay center.

2. The method of claim 1, wherein a counter provided at said relay center for each

associated financial institution is updated based on said transaction request message or said

transaction response message.

3. The method of claim 1, wherein said automated teller machine is managed by a particular

5 financial institution, further comprising the steps of:

identifying a non-associated financial institution, with which a transaction is to be

conducted, based on said account identifying medium inserted into said automated teller

machine;

creating a non-associate transaction request message based on information of said

10 identified non-associated financial institution;

transmitting said created non-associate transaction request message to a computer system

of said non-associated financial institution through said relay center; and

conducting a transaction with said non-associated financial institution through the

computer system of said particular financial institution.

4. A method of displaying financial transaction menu screens on a display of an automated

teller machine that is managed by a predetermined managing financial institution, comprising the

steps of:

accepting a medium that has identification information for identifying an account at one

5 of a plurality of financial institutions;

identifying a financial institution based on said accepted medium; and

if said identified financial institution is not said managing financial institution, displaying

a financial transaction menu screen unique to said identified financial institution on said display

in place of a menu screen created by said managing financial institution.

10 5. The method of claim 4, wherein after said financial institution is identified, a menu

screen previously stored in said automated teller machine is displayed on said display as an initial

transaction menu, and one or more succeeding menu screens received from a remote location are

displayed on said display.

6.   A method of displaying menu screens for use in financial transactions with an associated

financial institution and a non-associated financial institution on a display of an automated teller

machine that is managed by a managing financial institution, comprising the steps of:

if a card for said associated financial institution is accepted, identifying said associated

5   financial institution based on said card and displaying a menu screen unique to said identified

financial institution on said display; and

if a card for said non-associated financial institution is accepted, displaying a menu screen

for a non-associated financial institution created by said managing financial institution on said

display.

7.   A system of using an automated teller machine, comprising:

an automated teller machine for identifying a financial institution based on an account

identifying medium to conduct a financial transaction with a customer;

a plurality of financial institution systems for conducting transactions with said automated

5 teller machine; and

a relay center for relaying transactions between said automated teller machine and said

financial institution systems;

wherein said relay center transmits a transaction request message from said automated

teller machine to one of the financial institution systems identified by said automated teller

10 machine without passing through another financial institution system, and wherein said relay

center transmits a transaction response message transmitted from said identified financial

institution system to said automated teller machine.

8.   The system of claim 7, wherein said identified financial institution system updates

counters provided therein based on said transaction request message or said transaction response

15 message, and wherein said relay center updates counters provided therein based on said

transaction request message or said transaction response message.

9. The system of claim 8, wherein said relay center defines a settlement amount after exchanging information of the counters provided in said identified financial institution systems and the counters provided in said relay center.

10. The system of claim 9, wherein said automated teller machine is managed by a particular financial institution, wherein a settlement with said relay center is performed by said particular financial institution or a selected financial institution other than said particular financial institution, and wherein if a settlement is performed by said selected financial institution, said selected financial institution performs a settlement with another financial institution.

11. A system of using an automated teller machine, comprising:

an automated teller machine for identifying a financial institution based on an account

identifying medium to conduct a financial transaction with a customer;

a plurality of financial institution systems for conducting transactions with said automated

5 teller machine; and

a relay center for relaying transactions between said automated teller machine and said

financial institution systems;

wherein said automated teller machine enciphers a personal identification number

inputted by said customer and transmits the enciphered personal identification number to said

10 relay center for use in the identified financial institution, wherein said relay center transmits the

enciphered personal identification number to the identified financial institution system, and

wherein said identified financial institution system deciphers said enciphered personal

identification number.

12. The system of claim 11, wherein said financial institution system has a private key and a

15 public key, wherein said automated teller machine receives said public key from said financial

institution system through said relay center, and enciphers said personal identification number

using a public key which is different for each financial institution, and wherein said financial

institution system uses the private key for deciphering said personal identification number

enciphered by said public key.

13. An automated teller machine that is managed by a predetermined managing financial institution and is adapted for displaying menu screens for use in financial transactions on a display, the automated teller machine comprising:

means for receiving menu screen information through a network, the menu screen

5   information being created by each of a plurality of financial institutions;

means for storing said menu screen information received from said receiving means;

means for accepting a medium for identifying an account at a financial institution;

means for identifying said predetermined managing financial institution or another

financial institution based on said medium accepted by said accepting means; and

10   means, responsive to said identifying means identifying said another financial institution,

for reading said menu screen information for said another financial institution from said storing

means for display of one or more menu screens on said display.

14. The automated teller machine of claim 13, wherein said receiving means receives menu

screen information from one or more associated financial institutions including said

15   predetermined managing financial institution, wherein said storing means stores said menu

screen information from said one or more associated financial institutions received by said

receiving means, and additionally stores menu screen information for a non-associated financial institution created by said predetermined managing financial institution.

15.   The automated teller machine of claim 13, wherein said reading means, responsive to said identifying means identify said non-associated financial institution based on said medium,

5   displays one or more menu screens based on said menu screen information for said non-associated financial institution that is created by said predetermined managing financial institution and stored in said storing means.

16.   The automated teller machine of claim 13, wherein after a financial institution is identified by said identifying means, said reading means immediately reads initial menu screen

10 information from said storing means and, thereafter, said reading means reads succeeding menu screen information received from said receiving means and stored into said storing means.

17.   A relay center connected between an automated teller machine and a plurality of financial

institution systems through a network, comprising:

means for receiving a transaction request message from said automated teller machine

and for transmitting the transaction request message to a particular financial institution system;

5   means for receiving a transaction response message corresponding to said transaction

request message from said particular financial institution system and for transmitting said

transaction response message to said automated teller machine; and

means for updating a counter provided for each financial institution based on said

transaction request message or said transaction response message.

18.   A relay center connected between an automated teller machine and a plurality of financial

institution systems through a network, comprising:

means for storing transaction content for each particular financial institution into a

counter provided for each financial institution based on a transaction conducted between said

5   automated teller machine and a particular financial institution system;

means for receiving counter information owned by said particular financial institution

system from said particular financial institution; and

means for transmitting information of said counter provided for each financial institution,

which has the transaction content stored by said storing means, to said particular financial

10   institution system;

wherein the counter information is exchanged by said receiving means and said

transmitting means.

19.   The relay center of claim 18, further comprising means for accumulating settlement

information that is operable after exchange of the counter information among said plurality of

15   financial institution systems is finished by said receiving means and said transmitting means.